

KENTUCKY COUNTY HEALTH PROFILES, 1997

SUMMARY

HEALTH AND SOCIAL INDICATORS

POPULATION: Accurate and reliable population estimates are fundamental to any population-based health status analysis. All population figures used in this report are 1997 estimates provided by the Kentucky State Data Center, University of Louisville, and all population-based rates have been computed using these estimates. These estimates were provided in three racial categories: White, African American, or Black, and Other. Races other than White and Black comprised less than one percent of the estimated population of Kentucky in 1997. Therefore, due to limitations of space and the extremely small numbers of the Other population at the county level, statistics disaggregated by race in this report are presented for the White and Black populations only.

Also due to limitations of space, rates for many indicators in this report have not been included. Basic population data have been provided to allow the reader to calculate additional rates as need be.

TOTAL BIRTHS: Birth statistics are extremely important measures of health status as they serve as an indicator of a broad range of nutritional, environmental, and other health-related factors in a population.

Crude birth rate: In 1997, the crude birth rate in Kentucky was 13.5 births per 1,000 population, remaining unchanged since 1995 following a slow but steady decline through the early 1990s. The rate ranged from 8.4 per 1,000 in Lyon County to 20.2 per 1,000 in Christian County.

Under 18 birth rate: Births to teen mothers are a major public health concern as they are associated with higher rates of low birthweight and infant mortality and create educational, social, and economic problems for both mother and child. In 1997, the under 18 age-specific birth rate in Kentucky was 14.7 births per 1,000 females aged 10-17. The rate ranged from 29.7 per 1,000 in Green County to 3.5 per 1,000 in Lyon County. Statewide, 6.0% of all births were to mothers under 18, a decrease from 6.3% in 1996.

Weight less than 2,500 grams: Low birthweight is a major contributing factor in infant mortality and long-term disability. In 1997, 7.8% of children born in the state weighed less than 2,500 grams (5 lb. 8 oz.), just slightly less than the 1996 rate of 7.9%. By county, this percent varied from a high of 16.1% in Robertson County to a low of 1.3% in Elliott County.

Mothers without prenatal care, 1st trimester: Early prenatal care is associated with decreased risk of low birthweight and infant mortality. In 1997, 14.1% of Kentucky mothers did not receive prenatal care during the first trimester of pregnancy, a decrease from 15.3% in 1996. This measure ranged from 39.4% in Casey County to 4.8% in Ballard County.

Unmarried mothers: Unmarried mothers tend to have poorer birth outcomes than married mothers because they are disproportionately young, less educated, and are more likely to be poor. Among the factors related to births to unmarried mothers are higher rates of teenage pregnancy, lack of prenatal care, and low weight births. Statewide, the rate of births to unmarried mothers in 1997 was 295.2 per 1,000 live births, representing a slight decrease from 1996 following several years of steady increase. Carroll County had the highest rate, at 405.0 per 1,000; Trimble and Carlisle had the lowest rates, under 150 per 1,000.

WHITE BIRTHS: Due to the preponderance of whites in the total population of Kentucky (92.0%), birth indicators for the white population closely mirror the total in both ranking and rates, but tend to be slightly lower.

BLACK BIRTHS: The major indicators of birth outcomes continued to be less favorable for blacks than for the rest of the population. While showing some improvement from the previous year, the under 18 birth rate for blacks in 1997 was still over twice the rate for whites (28.4 to 13.4 per 1,000). A fourth (24.8%) of black mothers failed to receive prenatal care during the first trimester (compared to 13.1%), and the rate of unmarried births to black mothers was well over two and one-half times the white rate (720.6 to 255.4 per 1,000). Single-year black birth statistics, in particular, in most Kentucky

counties should be used with great caution due to the very small numbers involved.

INFANT MORTALITY: The infant mortality rate is one of the most universal and understandable measures of a population's health status. In 1997 the statewide rate was 7.2 infant deaths per 1,000 live births, and has continued to decline since the late 1980s. By county, infant mortality rates ranged from a high of 26.5 per 1,000 (based on three deaths) in McLean County to a low of 0.0 (29 counties recorded no infant deaths). Statewide, the infant mortality rate for whites was 7.0 deaths per 1,000 births, and for blacks it was 11.0 per 1,000. One should be particularly careful in using these rates at the county level due to the small numbers involved.

REPORTABLE DISEASE CASES: Despite the significant progress made in the reduction in incidence of infectious diseases in this century, they remain an important cause of illness and death. In addition, surveillance of infectious diseases continues to be of extreme importance in the face of new diseases and newly resistant pathogens which may emerge in the future. This report records the number of cases reported during 1997 of syphilis, pertussis, hepatitis A, hepatitis B, tuberculosis, *Chlamydia trachomatis* infections, animal rabies, and an index of foodborne diseases, the sum of *Salmonella*, *Shigella*, and *Campylobacter* infections.

SOCIOECONOMIC INDICATORS: Economic and social factors have long been associated with health status. Living conditions and health behaviors associated with poverty have such enormous implications for health that they cannot be ignored in any investigation of health status.

Population per primary care provider: This is an indicator of a population's access to medical care. Statewide, there were 1,721 persons per primary care physician. The counties exhibited wide variation in this ratio however. The highest was Robertson County, which had no primary care physicians, and the lowest was Fayette County, with 1,087 persons per primary care physician.

Medicaid eligible, FY 1997 and Medicaid recipients, unduplicated, FY 1997: These indicators measure medical care coverage by the Medicaid program for the financially and/or medically indigent. In state fiscal year 1997, more than one-half million people, 13.6% of the population of Kentucky, were eligible for Medicaid services. The average monthly

unduplicated number of recipients, almost 312,000 persons, comprised 8.0% of the population. Owsley County ranked highest in both Medicaid eligible percent (44.0) and Medicaid recipient percent (43.7). Oldham County ranked lowest in both measures at 3.2% and 3.1% respectively.

Food stamp recipients, AFDC (Aid to Families with Dependent Children) recipients, and WIC (Women, Infants, and Children) recipients: These measures present data on the proportions of the population who accessed programs for the indigent. In fiscal year 1998, 10.6% of the total population received food stamps. In calendar year 1997, 3.9% received AFDC benefits, and 9.9% of the eligible population were served by the WIC program. Owsley County ranked highest in all three of these measures at 40.0%, 15.5%, and 20.6% respectively.

Persons in poverty, 1995: Based on 1995 statistics, the most recent available, 17.9% of the population in Kentucky were below the poverty level. Kentucky counties ranged from 46.6% in Owsley County to 5.9% in Oldham County.

Persons < 18 in poverty, 1995: It is estimated that slightly over one-quarter (26.9%) of the total population under the age of 18 lived in poverty in 1995. Eight counties, all in the southeastern part of the state, were in excess of 50% in this measure. Owsley County again topped the list at 65.4%.

Unemployed: Unemployment rates in 1997 ranged from a high of 18.0% in Adair County to 2.0% in Oldham County. The statewide rate was 5.4%.

1995 median household income: According to 1995 statistics, the most recent available, the median household income in Kentucky was \$28,929, up from \$25,221 in 1993. By county, median household income ranged from \$52,475 in Oldham County to \$14,393 in Owsley County.

EDUCATION: Educational attainment is closely related to socioeconomic status and also has implications for health.

Mothers with less than 12 years of education: In 1997, nearly one-quarter (22.6%) of women giving birth had less than a high school education. This percent ranged from 46.8% in Clay County to 9.7% in Oldham County.

Transition rate (1996-1997): This indicator measures the percent of high school graduates who successfully make the transition to employment, military service, or further schooling. Statewide, for the 1996-1997 school year, 95.2%

of graduates made the transition successfully. Eleven counties recorded 100%. Nelson County was the lowest, at 80.0%.

Dropout rate (1996-1997): During the 1996-1997 Kentucky school year, 3.7% of students in grades 7-12 dropped out of school. This rate ranged from 7.8% in Butler County to 0.7% in Lyon County.

OCCUPATIONAL INJURIES: In 1997, there were 146 fatal occupational injuries in the state, 34 agricultural, and 112 nonagricultural. For the second year, the number of fatal agricultural injuries decreased while the number of nonagricultural injuries increased.

A complete accounting of occupational injuries other than those resulting in fatality is difficult to obtain in Kentucky. The most complete nonfatal injury data available by county are from Workers' Compensation claims, which do not record all occupational injuries, particularly agricultural. Nevertheless, 44,637 nonfatal occupational injuries were reported in 1997, 594 agricultural and 44,043 nonagricultural.

ADULT ABUSE: Adult abuse and neglect are important causes of injury and death, and they are increasingly recognized as public health problems. In Kentucky in 1997, there were 9,590 substantiated incidents of adult abuse (abuse by someone other than spouse), a rate of 3.3 per 1,000 persons 18 and older and 12,667 substantiated incidents of spouse abuse, a rate of 4.3 per 1,000. Both of these measures experienced decreases from the previous year in both number and rate.

CHILD ABUSE AND NEGLECT: Statewide in 1997, there were 6,076 substantiated incidents of child physical abuse, 1,635 of child sexual abuse,

and 18,594 of child neglect per 1,000 persons under age 18. These translated to rates of 6.3, 1.7, and 19.3 per 1,000 persons under age 18, respectively. Child physical and sexual abuse experienced declines in both number and rate from 1996.

VIOLENT CRIMES: Violence, both domestic and nondomestic, is increasingly recognized as a serious public health problem. In 1997, 254 homicides occurred in Kentucky. In addition, 1,191 rapes and 7,997 assaults were reported to police. These acts of intentional violence are often related to socioeconomic conditions and have major impact on the health of a community. Compared to the previous year, the number of reported rapes and assaults decreased, but there was an increase in the number of homicides, reversing the pattern of the year before. Data on violent crimes are reported by county of occurrence.

MOTOR VEHICLE CRASHES: Motor vehicle crashes are one of the greatest causes of unintentional injury and death, and affect all age groups. In 1997, there were 865 persons killed and 56,342 persons injured in motor vehicle crashes in Kentucky. Both figures increased from the previous year's totals of 846 and 55,909 respectively. Data also indicate that alcohol was a frequently contributing factor, particularly in fatal crashes, in which over a fourth (26.3%) involved drinking drivers. Data on motor vehicle crashes are presented in the health and social indicators table by county of occurrence.

LEADING AND SELECTED CAUSES OF RESIDENT DEATHS

Cause of death statistics have long been among the most ascertainable, readily available, and comparable of all health status indicators for a population. Virtually 100% of deaths are recorded, and causes of death are assigned by established and consistent nosological procedures. Numbers and crude rates for all ages and each of eight age groups, age-adjusted rates (AAR), and years of potential life lost prior to age 75 (YPLL-75) are shown for each leading and selected cause. Explanations of the calculation of age-adjusted rates and YPLL-75 are included in Definitions and Technical Notes in the Appendix. The ten leading causes for the total, white, and black populations, as well as a set of selected causes are presented for each county.

LEADING CAUSES - TOTAL POPULATION: In Kentucky in 1997, there were 37,774 total resident deaths resulting in a crude rate of 966.8 deaths per 100,000 population. The age-adjusted rate (adjusted to the 1940 U.S. standard population) was 541.1 deaths per 100,000, an increase from 532.2 in 1996. By county, the age-adjusted rate ranged from 880.3 per 100,000 in Wolfe County to 404.9 in Boone County.

The top five leading causes of death, heart disease, malignant neoplasms, cerebrovascular disease, chronic obstructive pulmonary disease (COPD), and unintentional injuries, accounted for almost three of every four (72.8%) deaths.

Heart disease accounted for almost one-third (32.6%) of total deaths, and was the leading cause of death in 1997, as it has been for several years. It was the leading cause in 116 of the state's 120 counties, and also accounted for one-fifth (20.1%) of years of potential life lost. The statewide age-adjusted rate was 157.1 deaths per 100,000, up from 149.7 in 1996. The AAR ranged from over 268.8 per 100,000 in Martin County to 95.8 in Scott County.

Malignant neoplasms (cancer), the second leading cause, was responsible for nearly a quarter (23.8%) of deaths statewide, and was the leading cause in four counties. Malignant neoplasms, being more prevalent than heart disease among persons under 65, accounted for 24.0% of total YPLL. The statewide AAR, 145.7 per 100,000, declined slightly from the 1996 rate of 146.5. Wolfe County had the highest AAR, 261.2 per 100,000, and Trimble had the lowest, 78.2.

Cerebrovascular disease (stroke), the third leading cause statewide, was responsible for 6.7% of total deaths, but only 2.7% of YPLL. The statewide AAR was 27.9 per 100,000, down from 29.0 in 1996. The AAR ranged from 80.4 per 100,000 in Robertson County to 9.6 in Jackson County.

Chronic Obstructive Pulmonary Diseases (COPD) includes such diseases as chronic bronchitis, emphysema, and asthma. COPD was the fourth leading cause of death in Kentucky in 1997, accounting for 5.2% of total deaths. The statewide AAR was 27.6 per 100,000, just slightly higher than the 1996 rate of 27.3. Among the counties, Bath had the highest AAR, at 62.9 per 100,000, and Washington County had the lowest at 4.5 per 100,000.

Unintentional injuries, the fifth leading cause, accounted for only 4.5% of total deaths. However, due to their affect on younger as well as older age groups, they were the third greatest cause of years of potential life lost prior to age 75, making up 16.1% of the total. Unintentional injury was the leading cause of death for ages 1-34. The statewide AAR was 37.6 per 100,000, virtually unchanged from the 1996 rate of 37.7. The AAR ranged from 130.4 per 100,000 in Carlisle County to 9.2 in McLean.

SELECTED CAUSES - TOTAL POPULATION: The following causes were selected as a result of their being included either in the Assessment Protocol for Excellence in Public Health (APEXPH) core data set or in the Centers for Disease Control's consensus set of health status indicators.

Lung cancer accounted for over one-third (35.0%) of all cancer deaths and was a major cause of death for persons 45 and older in 1997. The statewide age-adjusted rate was 54.1 per 100,000, up slightly from 53.7 in 1996. Breathitt County had the highest rate at 152.2 per 100,000, and Spencer County had the lowest, 16.1 per 100,000.

Motor vehicle crashes were the greatest single cause of unintentional injuries resulting in death, responsible for almost half (49.1%) of such deaths. In addition, they accounted for 60.7% of all years of potential life lost due to unintentional injuries. The statewide AAR for motor vehicle crash deaths was 21.1 per 100,000, a slight increase from 20.4 in 1996. By county, the AAR

ranged from 98.1 per 100,000 in Cumberland County to 0.0 (five counties had no resident motor vehicle crash fatalities).

Female breast cancer was responsible for approximately one of every seven (14.9%) cancer deaths in women in 1997. The statewide age-adjusted rate was 19.3 deaths per 100,000 female population, a slight increase from 18.9 in 1996. Fulton County had the highest AAR, at 52.6 per 100,000 women. Fourteen counties had no deaths attributable to female breast cancer.

The remaining selected causes, **cirrhosis of liver, homicide, congenital anomalies, and drug related deaths** had relatively low age adjusted rates, but are important indicators for particular age groups and because of their relationships to socioeconomic and lifestyle factors.

LEADING CAUSES - WHITE: As is the case for birth statistics, due to the preponderance of whites in the total population of Kentucky, the leading causes of death for the white population closely mirror the total population in both ranking and rates. However, for most causes of death, white rates tend to be somewhat lower than the population as a whole, e.g., the AAR for all causes was 530.1 per 100,000 for whites compared to 541.1 for the total population.

LEADING CAUSES - BLACK: Age-adjusted rates for most leading causes of death for blacks were greater in 1997 than those for whites. Statewide, the rate for all causes was 731.4 per 100,000 compared to 530.1 for whites. Blacks experienced the same top three leading causes, but their AARs were considerably higher. The fourth leading cause for blacks was unintentional injuries with an age adjusted rate of 38.7 per 100,000, just slightly higher than the rate of 37.7 for whites. The fifth leading cause was diabetes mellitus, with an AAR of 28.6 per 100,000, compared to 13.3 for whites. Homicide appeared as the seventh leading cause of death for blacks. Suicide, the eighth leading cause among whites, was not among the top ten causes for blacks. The reader should be particularly cautious in using black rates in many counties since they are based on very small populations.

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